d) a control device for controlling the system;

e) a signal processing data entry and data storage device for processing and storing data derived from energization of the ultrasonic transducer array to output a signal to the display monitor in order to display an image of an interior of a patient's body; and

f) a bed for supporting a patient;

g) the catheter interface module, the display monitor and the control device are located adjacent to the bed such as to be easily viewed and operated respectively by a clinician; and

h) the signal processing data entry and storage device is located remotely from the bed at a sufficient distance to enable a clear space around the bed for occupation by a medical team so that the medical team can be adjacent to the patient.

2. (Amended) An IVUS system as claimed in claim 1 in which at least one of the following is located remotely from the bed:

(i) a power distribution unit;

(ii) a video recorder; and

(iii) a video printer.

3. (Amended) An IVUS system as claimed in claim 1 in which the display monitor comprises a flat screen monitor.

4. (Amended) An IVUS system as claimed in claim 1 in which the control device incorporates a device to enable control

instructions to be given by voice and incorporates a voice recognition device for accepting and implementing those instructions.

5. (Amended) An IVUS system as claimed in claim 1 in combination with an ultrasound system which employs a transducer which in use is placed externally of the patient.

6. (Amended) An IVUS system as claimed in claim 1 in combination with an X-ray system.

7. (Amended) An IVUS system as claimed in claim 1 in which the control device includes an infra-red remote control device to enable control instructions to be given from a position adjacent the patent to remotely located units.

8. (Amended) An IVUS system as claimed in claim 1 in which the display monitor is mounted on the catheter interface module.

9. (Amended) A method of arrangement components of the IVUS system as defined in claim 1, which method comprises the steps of:

a) locating the catheter interface module, the image monitor and the control device adjacent the bed such as to be easily viewed and operated respectively by a clinician; and

b) locating the signal processing data entry and data storage device remotely from the bed at a sufficient distance to enable a clear space around the bed for occupation by a medical team so that the team can be adjacent the patient.

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10. (Amended) A method as claimed in claim 9, comprising the step of locating at least one of the following at a position remote from the bed:

(i) a power distribution unit;

(ii) a video recorder; and

(iii) a video printer.